REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 13-28 are currently pending in the application. Of these claims, claims 13-16, 21, 23, and 26-28 stand rejected; and claims 17-20, 22, 24, and 25 stand objected to.

By the present amendment, claims 17, 22, and 24 have been placed into independent form including all the limitations of their parent claims. Consequently, claims 17-20, 22, 24, and 25 are now allowable.

In the office action mailed October 3, 2003, claims 13-16, 21, 23, 26, and 27 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,521,907 to Ennis, Jr. et al. in view of U.S. Patent No. 5,535,193 to Zhang et al., in view of U.S. Patent No. 6,377,546 to Guerin et al., and further in view of U.S. Patent No. 6,330,226 to Chapman et al. Further in said office action, claim 28 was rejected under 35 USC 103(a) as being unpatentable over Ennis, Jr. et al. in view of Zhang et al., Guerin et al, Chapman et al., and further in view of U.S. Patent No. 5,701,302 to Geiger. The foregoing rejections are respectfully traversed by the present amendment.

The present invention relates to a non-intrusive method for measuring loss rates and transfer durations for data in a telecommunication network in packet mode. The method broadly comprising the steps of performing measurement operations with a plurality of observing probes that are synchronized and distributed at different points in the network on data packets which are being transmitted through the network, which performing step comprises dating and identifying the data packets, transmitting measurement results from the dating and identifying step from the probes to a collecting module, the performing step further comprising classifying the data packets in a homogeneous flow and counting the data packets in a homogeneous flow and transmitting measurement results from the classifying and counting steps from the probes to the collecting module through the network, and performing with the collecting module a correlation between all of the measurement results received from the probes including determining unidirectional transfer durations per flow or information flow group and the loss rate for the data packets.

Independent claims 13 and 16 in the instant application are directed to a method and system for measuring loss rates and transfer duration of data in a telecommunication network in a packet mode. According to this method and system, probes connected and distributed at different points in a network are synchronized with each other and transmit measurement results to a collecting module through the network.

The measurements performed by the probes consist of dating, counting and identifying the data packets transmitted through the network. The collecting module performs correlation between the measurement results transmitted by the probes in order to determine unidirectional transfer durations per flow of data packets and loss rates of data packets.

The Ennis, Jr. et al. patent discloses network probes performing measurements in a communication network. However, in contrast with the claimed invention, the probes are not synchronized with each other and do not transmit their measurement results through the analyzed network but through additional lines 14 and 15. The solution disclosed in this patent is therefore not suitable for a wide area network but only for a local network. This patent discloses that the probes perform travel time measurement, i.e. representing the sum of transfer time of a data packet in one direction and the transfer time of another data packet in the reverse direction. From this sum, it is not possible to determine the individual transfer times in each direction. Therefore, such a travel time measurement cannot be compared to unidirectional transfer duration measurement as set forth in the claims. Ennis, Jr. et al. further fails to disclose classifying data packets in a flow, counting data packets in a flow, and determining loss rate for the data packets.

The Zhang et al. patent discloses network probes connected in different points of a network. These probes are connected to a PC and are synchronized through additional connection lines 42. As Ennis, Jr. et al., the solution disclosed in this patent is merely suitable for a local network. As in Ennis, Jr. et al., the Zhang et al. patent further fails to disclose unidirectional transfer time measurements, classifying and counting data packets in a flow and determining loss rate for data packets.

Guerin et al. merely discloses a router performing classification of data packets into a stream and therefore, does not cure the deficiencies of Ennis, Jr. et al. and Zhang et al.

Chapman et al. merely discloses a router computing packet loss in TCP streams (in transport layer) and not any type of data streams and in particular in IP streams (network layer).

The method disclosed by Chapman et al. does not differentiate data losses in a wide area network, in the ends of the links connected to the wide area network and in the broadcasting networks outside the measured domain. Thus, the loss measurements may be wrong.

A review of these patent documents show that none of the cited references suggest probes for analyzing a telecommunication network that are synchronized and transmit their measurement results through the analyzed network. Further, none of the cited references suggest performing unidirectional transfer time measurements.

It is apparent to Applicant that the Examiner has merely found certain components of the present invention in the prior art and is improperly attempting to combine them to meet the claimed subject matter. It is noted that the obviousness rejection is deficient in that the Examiner does not provide any analysis as to what would motivate one of ordinary skill in the art to combine three references with Ennis, Jr. et al. The Examiner states the motivation is to determine when the packets are transmitted and received; however, the Examiner has not identified where in any of the secondary references this motivation can be found. It is submitted that the only basis for such motivation is Applicant's disclosure.

For these reasons, claims 13-16, 21, 23, 26, and 27 are believed to be allowable. It should be noted that claims 14-16, 21, 23, and 27 are believed to be allowable on their own accord as well as the same reasons that their parent claims are allowable.

With respect to claim 28, Applicant notes the additional citation of the Geiger patent. However, this reference does not overcome the aforementioned deficiencies of the Ennis, Jr. et al., Zhang et al., Guerin et al., and Chapman et al. patents.

For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicant's attorney at the telephone number listed below.

Enclosed herewith is a check in the amount of $86.00 to cover the cost of the extra

independent claims. Should the Commissioner determine that an additional fee is due, he is

hereby authorized to charge said fee to Deposit Account No. 02-0184.

Respectfully submitted,

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Date: January 5, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on **January 5, 2004**.

Nicole Motzer